

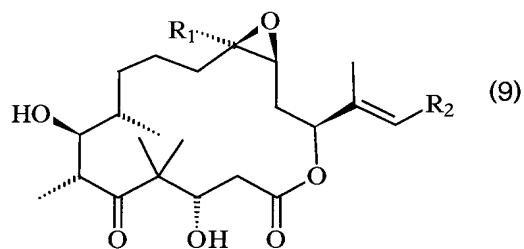
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-34 (canceled)

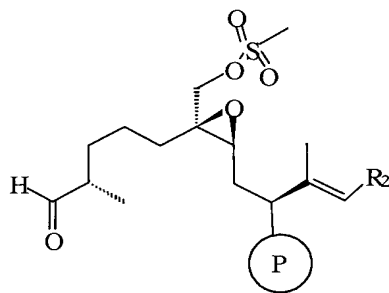
Claim 35 (currently amended): A process for the preparation of epothilone derivatives of formula 9:




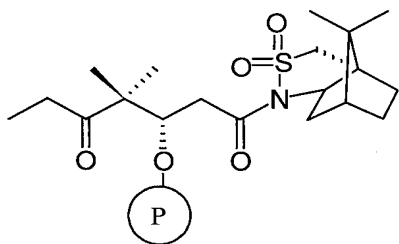
R1 is methyl;

R2 is an unsubstituted or substituted aryl; an unsubstituted or substituted heteroaryl; or an unsubstituted or substituted heterocyclic radical fused to a benzene nucleus;
comprising the steps of:

a) reacting a compound of formula 1:

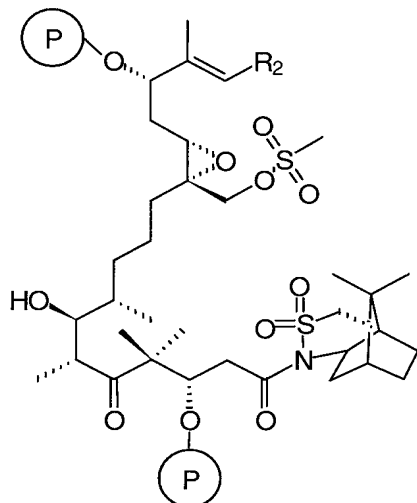


wherein R2 has the meanings given above; wherein a mesylate group of the compound of formula 1 may be replaced with a tosylate group; and  is an alcohol protecting group;
with a compound of formula 2:




(2)

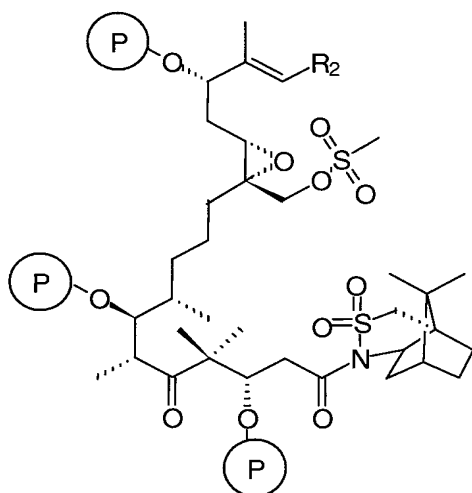
in the presence of a Lewis acid and addition of a base in an inert solvent to yield a compound of formula 3:




(3)

wherein R₂ and  have the above given meanings and wherein a mesylate group of the compound of formula 3 may be replaced with a tosylate group;

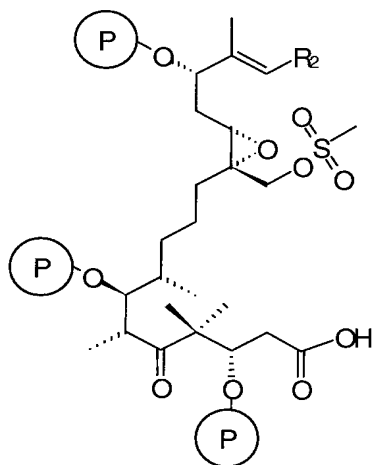
b) the reacting compound of formula 3 in the presence of a silyl-ether forming compound to produce the compound of formula 4:




(4)

wherein R₂ and  have the meanings given above and wherein a mesylate group of the compound of formula 4 may be replaced with a tosylate group;

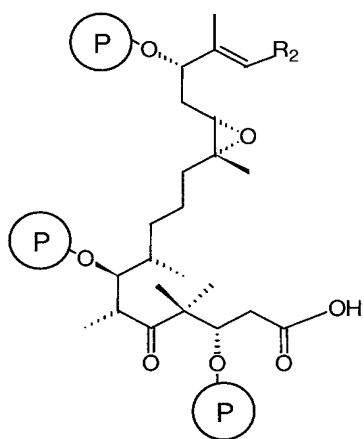
c) converting the compound of formula 4 to produce a compound of formula 5:



(5)

wherein R₂ and  have the meanings given above and wherein the mesylate group of the compound of formula 5 may be replaced with a tosylate group;

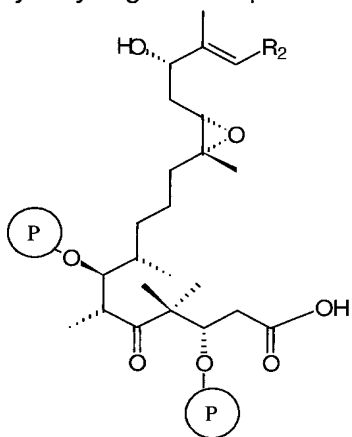
d) reacting compounds of above formula 5 with a reducing reagent in an inert solvent to yield a compound of formula 6:



(6)

wherein R₂ and the (P) above have given meanings;

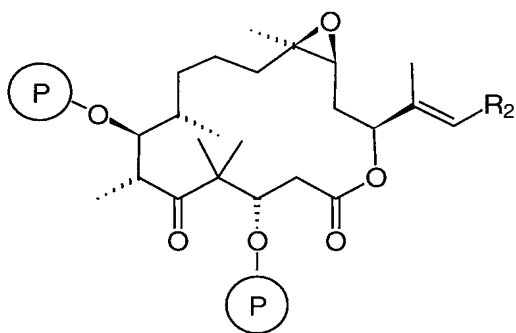
e) hydrolysing the compound of formula 6, to produce a compound of formula 7:



(7)

wherein R₂ and (P) have the above given meanings;

f) macrolactonizing a compound of formula 7, to produce the epothilone derivative of formula 8:



(8)

wherein R2 and ^P have has the above defined meanings; and

g) treating the compound of formula 8 with HF·pyridine in an inert solvent to produce the epothilone derivatives of formula 9.

Claim 36 (previously presented): The process according to claim 35, wherein in step a) the compound of formula 1 is reacted with the compound of formula 2 in the presence of TiCl₄ and Hünig base (iPr₂Net) in dichloromethane.

Claim 37 (previously presented): The process according to claim 35, wherein in step b) the compound of formula 3 is reacted with a silyl-ether forming compound in the presence of 2,6-lutidine in dichloromethane.

Claim 38 (previously presented): The process according to claim 35, wherein in step c) the compound of formula 4 is converted by splitting off the chiral auxillary group with TBAOH/H₂O₂ in DME or LiO₂H in THF/MeOH/H₂O.

Claim 39 (previously presented): The process according to claim 35, wherein in step d) the compound of formula 5 is reacted with LiBHET₃ in THF.

Claim 40 (previously presented): The process according to claim 35, wherein in step e) the compound of formula 6 is hydrolysed with TASF or HF pyridine in an inert solvent.

Claim 41 (previously presented): The process according to claim 35, wherein in step f) the compound of formula 7 is macrolactonized by treating with Et₃N and 2,4,6-trichlorobenzoyl chloride and subsequently reacted with a solution of 4-DMAP in toluene.

Claims 42-68 (canceled)

Claim 69 (currently amended): The process according to claim 35 wherein a mesylate group of the compound of formula 1 ~~may be~~ is not replaced with a tosylate group.

Claim 70 (previously presented): The process according to claim 35 where step a) first occurs at lower temperatures between -50° to -100°C and thereafter elevated to temperatures between -20° to +20°C to obtain the compound of formula 3.

Claim 71 (previously presented): The process according to claim 35 wherein step b) occurs at temperature between -70° and 25°C.

Claim 72 (previously presented): The process according to claim 35 wherein step e) the compound of formula 6 is hydrolyzed with a desilylation reagent or an acid in an inert solvent.

Claim 73 (previously presented): The process according to claim 72 wherein the acid in an inert solvent is TASF in THF or HF-pyridine in THF.

Claim 74 (previously presented): The process according to claim 35 where step a) occurs at a temperature between 0°C and 30°C.